



ENGINE - NO.4 BEARING COMPARTMENT - INTRODUCE A NEW HEATSHIELDED NO.4 BEARING SCAVENGE  
TUBE ASSEMBLY - CATEGORY CODE 5 - MOD.ENG-72-0087

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines before Serial No.V0143, except Engine Serial No.V0138, V0140 and V0141.

B. Reason

(1) Condition

Rubbing of the Heatshield against the Diffuser Case Strut could cause the Heatshield to fragment.

(2) Background

Heatshield fragmentation occurred on some experimental engines. This happened because the original Tube Assembly had thin Heatshields and interference with the Diffuser Case Strut was possible under adverse tolerance conditions.

(3) Objective

To prevent the potential for No.4 Bearing Carbon Seal damage as a result of Heatshield fragmentation.

(4) Substantiation

The new configuration was run successfully in an experimental endurance engine.

(5) Effects of Bulletin on Workshop Procedures:

Removal/Installation	Not affected
Disassembly/Assembly	Not affected
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplemental Information

None

**C. Description**

- (1) Provide a new NO.4 Bearing Heatshield Assembly which features an increased tube thickness, and increased Heat Shield thickness.
- (2) Restore the bolts on Heatshield halves that fit at the top of the No.4 Bearing Scavenge Tube Assembly.

**D. Approval**

The Part Number changes and/or part modifications described in Sections 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

**E. Compliance**

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Accomplish when the engine is disassembled sufficiently to afford access to the affected subassembly (i.e. modules accessories, Components, build groups) and to all affected spare subassemblies.

**F. Manpower**

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) At Overhaul	TOTAL 26 minutes
(a) To gain access	
(i) Remove No.4 bearing scavenge tube .. ..	11 minutes
	TOTAL 11 minutes
(b) To rework	Not applicable (No rework required)
(c) To return to subassembly	
(ii) Install No.4 bearing scavenge tube .. ..	15 minutes
	TOTAL 15 minutes

**G. Material – Price and Availability**

- (1) Modification Kit not required.

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- (2) See "Material Information" section for prices and availability of future spares.

## H. Tooling - Price and Availability

Special tools are not required

## I. Weight and Balance

- (1) Weight change .. .. None
- (2) Moment arm .. .. No effect
- (3) Datum .. .. Engine front mount centreline  
(Powerplant Station P.P.S. (100))

## J. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

## K. References

- (1) Internal Reference No.

EC88VA338

90VA114

- (2) Other References

- (1) IAE V2500 Service Bulletin Number.

(a) V2500-ENG-72-0004 (Engine - Diffuser Case Assembly - Replace the No.4 Bearing Scavenge Tube Assembly).

- (2) V2500 Engine Manual.

## L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-42-20, Figure 2, to add the new parts.
- (2) V2500 Engine Manual, Chapter/Section 72-42-20, Cleaning, to add the new parts.
- (3) V2500 Engine Manual, Chapter/Section 72-42-20, Inspection/check to add the new parts.

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## 2. Accomplishment Instructions

### A. Rework Instructions

- (1) There are no rework instructions necessary for this Service Bulletin.

### B. Assembly Instructions

- (1) Remove the 2A2028-01, 2A0830-01, 2A0830-001, or 2A0949-01 No.4 Bearing Scavenge Tube Assembly by the approved procedure in Reference (2) Chapter/Section 72-42-00, Disassembly

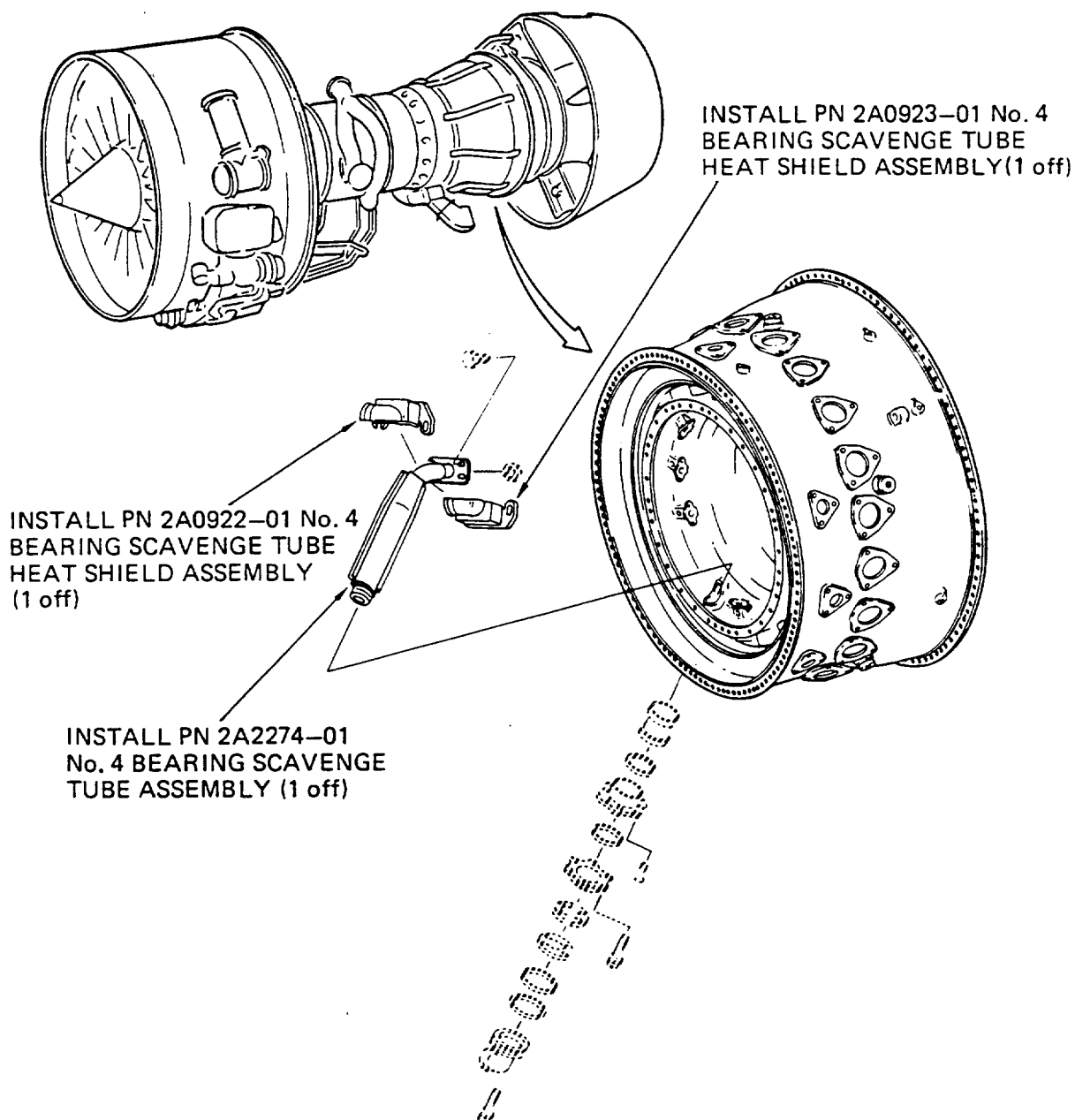
NOTE: If V2500-ENG-72-0004 was done, it included the removal of Heatshields 2A0922-01 and 2A0923-01.

- (2) Install the 2A2274-01 No.4 Bearing Scavenge Tube Assembly (1 off) by the approved procedure in Reference (2) Chapter/Section 72-42-00, Assembly. See Figure 1.
- (3) When the No.4 Bearing Housing is installed (by the approved procedure in Reference (2) Chapter/Section 72-42-00 Assembly) the Heat shields 2A0922-01 (1 off) and 2A0923-01 (1 off) will be installed.

### C. Recording Instructions

- (1) A record of accomplishment is necessary.

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Location of No.4 Bearing Scavenge Tube Assembly  
Fig.1

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3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
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For Engines Incorporating V2500-ENG-72-0004

2A2274-01 (72-42-20)	1	-	Tube - Scavenge, No.4 Bearing Assembly	2A2028-01 (02-020) or 2A0830-001 (02-020)	(A)(B)  (C)
2A0922-01 (72-42-20)	1	702.00	Shield - Heat, No.4 Bearing Scavenge Tube, Assembly	- (02-380)	(A)
2A0923-01 (72-42-20)	1	702.00	Shield - Heat, No.4 Bearing Scavenge Tube, Assembly	- (02-400)	(A)

For Engines prior to V2500-ENG-72-0004

2A2274-01 (72-42-20)	1	-	Tube - Scavenge, No.4 Bearing Assembly	2A0830-01 (02-020) or 2A1949-001 (02-020)	(A)(B)  (C)
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C. Instruction/Disposition Code Statements:

- (A) New part is currently available.
- (B) Old part will no longer be available.
- (C) Old part was obtained by modification.

NOTE: The estimated 1991 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

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